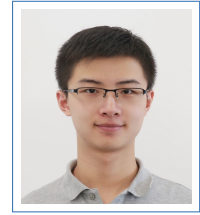


Yu Liu (Louis)

Room 304
Ho Sin Hang Engineering building
The Chinese University of Hong Kong
Shatin, N.T., Hong Kong
☎ +86 18612812134
✉ liuyuisanai@gmail.com
🌐 liuyu.us



Education

- 2017-2019 **Ph.D, MMLab, The Chinese University of Hong Kong**, Hong Kong
RI: optimization problems in large-scale detection / retrieval and autoML.
Supervisor: Xiaogang Wang
- 2012-2016 **B.E., computer science / math, BeiHang University**, Beijing, China
Bachelor degree with the best bachelor thesis (1/230)

Work Experience

- 2020-now **Vice Research Director, SenseTime Ltd.**, Hong Kong
Tech Lead of X-Lab, in charge of 4 research groups:
X-AGI: Deep reinforcement learning for gaming/system optimization.
X-Meta: Building RL-based autoML system for facial recognition.
X-Face: Foundation research for large-scale facial recognition.
X-Temporal: Building open-set level video understanding.
- 2019-2019 **Research Intern, Google AI**, Seattle, USA
Research on AutoML, NAS and neural network understanding
- 2016-2017 **Researcher, SenseTime Ltd.**, Beijing/Hong Kong
R&D team leader
Large-scale object/face detection and recognition
Optimization problems in training lightweight models.
- 2015-2016 **Research Intern, Microsoft Research (Asia)**, Beijing, China
Intern of Vision Computing group.

Publication on Conference

*equal contribution +corresponding author

- ECCV 2020 **Discriminability Distillation in Group Representation Learning**
Manyuan Zhang, Guanglu Song, Hang Zhou, **Yu Liu**⁺
- ECCV 2020 **Learning Where to Focus for Efficient Video Object Detection**
Zhengkai Jiang, **Yu Liu**⁺, Ceyuan Yang, Jihao Liu, Gao Peng, Qian Zhang, Shiming Xiang, Chunhong Pan
- CVPR 2020 **Search to Distill: Pearls are Everywhere but not the Eyes**
(oral) **Yu Liu**, Xuhui Jia, Mingxing Tan, Raviteja Vemulapalli, Yukun Zhu, Bradley Green, Xiaogang Wang
- CVPR 2020 **Revisiting the Sibling Head in Object Detector**
Guanglu Song, **Yu Liu**, Xiaogang Wang

- CVPR 2020 **Rotate-and-Render: Unsupervised Photorealistic Face Rotation from Single-View Images**
Hang Zhou, Jihao Liu, Ziwei Liu, **Yu Liu**⁺, Xiaogang Wang
- AAAI 2020 **KPNet: Towards Minimal Face Detector**
(oral) Guanglu Song, **Yu Liu**⁺, Yuhang Zang, Xiaogang Wang
- AAAI 2020 **Temporal Interlacing Network**
Hao Shao, Shengju Qian, **Yu Liu**⁺
- ICCV 2019 **Enhanced Quality Aware Network for Video based Face Recognition , (workshop) Top-1 solution for ICCV19 LFR Challenge**
Yu Liu, Guanglu Song, Manyuan Zhang, Jihao Liu, Yucong Zhou, Junjie Yan
- ICCV 2019 **Differentiable Kernel Evolution**
Yu Liu, Jihao Liu, Ailing Zeng, Xiaogang Wang
- ICCV 2019 **Knowledge Distillation via Route Constrained Optimization**
(oral) Xiao Jin, Baoyun Peng, Yichao Wu, **Yu Liu**, Jiaheng Liu, Ding Liang, Junjie Yan, Xiaolin Hu
- ICCV 2019 **Correlation Congruence for Knowledge Distillation**
Baoyun Peng, Xiao Jin, Jiaheng Liu, Shunfeng Zhou, Yichao Wu, **Yu Liu**, Dongsheng Li
- CVPR 2019 **Conditional Adversarial Generative Flow for Controllable Image Synthesis**
Rui Liu, **Yu Liu**, Xinyu Gong, Hongsheng Li, Xiaogang Wang
- AAAI 2019 **Gradient Harmonized Single-stage Detector**
(oral) Buyu Li*, **Yu Liu***, Xiaogang Wang (equal contribution)
- AAAI 2019 **Talking Face Generation by Adversarially Disentangled Audio-Visual Representation**
(oral) Hang Zhou, **Yu Liu**, Ziwei Liu, Ping Luo, Xiaogang Wang
- ECCV 2018 **Transductive Centroid Projection for Semi-supervised Large-scale Recognition**
Yu Liu, Guanglu Song, Jing Shao, Xiao Jin, Xiaogang Wang.
- CVPR 2018 **Exploring Disentangled Feature Representation Beyond Face Identification**
Yu Liu, Fangyin Wei, Jing Shao, Lu Sheng, Junjie Yan, Xiaogang Wang
- CVPR 2018 **Beyond Trade-off: Accelerate FCN-based Face Detector with Higher Accuracy**
Guanglu Song*, **Yu Liu*** (*equal contribution)
- AAAI 2018 **Region-based Quality Estimation Network for Large-Scale Person Re-identification**
Guanglu Song, Biao Leng, **Yu Liu**, Congrui Hetang, Shaofan Cai
- NIPS 2017 **Rethinking Feature Discrimination and Polymerization for Large-scale Recognition , Deep Learning Workshop**
Yu Liu, Hongyang Li, Xiaogang Wang
- ICCV 2017 **Recurrent Scale Approximation for Object Detection in CNN**
Yu Liu, Hongyang Li, Junjie Yan, Fangyin Wei, Xiaogang Wang, Xiaoou Tang
- CVPR 2017 **Quality Aware Network for Set to Set Recognition**
Yu Liu, Junjie Yan, Wanli Ouyang
- CVPR 2017 **Scale-Aware Face Detection**
Zekun Hao, **Yu Liu**, Junjie Yan

ECCV 2016 **POI: Multiple Object Tracking with High Performance Detection and Appearance Feature**

Fengwei Yu, Wenbo Li, Quanquan Li, **Yu Liu**, Xiaohua Shi, Junjie Yan

2017 **Learning Deep Features Via Congenerous Cosine Loss for Person Recognition** , *arXiv preprint arXiv:1702.06890*

Yu Liu, Hongyang Li, Xiaogang Wang

Publication on Journal

2018 **Zoom out-and-in network with map attention decision for region proposal and object detection** , *International Journal of Computer Vision (IJCV)*

Hongyang Li, **Yu Liu**, Wanli Ouyang, Xiaogang Wang

2017 **Crafting GBD-Net for Object Detection**, *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*

Xingyu Zeng, Wanli Ouyang, Junjie Yan, Hongsheng Li, Tong Xiao, Kun Wang, **Yu Liu**, Yucong Zhou, Bin Yang, Zhe Wang, Hui Zhou, Xiaogang Wang

2016 **3-D Object Understanding with 3D Convolutional Neural Networks** , *Information Science*

Biao Leng, **Yu Liu**, Kai Yu, Xiangyang Zhang, Zhang Xiong

Honors and Awards

- Won the **1th place** in NIST FRVT held by US government
- Won the **1th place** in CVPR20 ActivityNet Challenge
- Won the **1th place** in ICCV19 Multi-Moments in Time (MIT) Challenge
- Won the **1th place** in ICCV19 OpenImage Object Detection Challenge
- Won the **1th place** in ICCV19 OpenImage Instance Segmentation Challenge
- **Google PhD Fellowship** in 2019 (**1/China, 50/world**)
- Won the **1th place** in ICCV19 Lightweight Face Recognition Challenge
- Won the **1th place** in 2018 NIST-FRVT threshold based 1:N track
- Won the **1st place** in Multiple Objects Tracking Challenge (**MOT16**) in 2016
- Won the **1st place** in detection task of **ImageNet** (ILSVRC2016) in 2016
- The best graduation thesis in Beihang University in 2016 (1/230)
- Won the IEEE-Microsoft undergraduate scholarship in 2016 (40/world)
- The Outstanding Winner of Challenge Cup of China in 2015(top 1)
- The First Prize of Fengru Cup (top 2.8%) in 2015
- CCF Certified Software Professionals top 5% in 2015
- Won research fundings for NTPIEU as project leader in 2014
- Won “Learning Merit Scholarship” twice in 2013 and 2014
- Won “Competition of science and technology scholarship” twice in 2013 and 2014

TA Experience

2019 **ENGG2450A: Probability and Statistics for Engineers** , *The Chinese University of Hong Kong (CUHK)*

2018 **ENGG2420B: Advanced Engineering Math**, *CUHK*

2018 **ENGG2450A: Probability and Statistics for Engineers** , *CUHK*

2017 **ELEG2401: Introduction to Embedded Systems**, *CUHK*
2015 **Object-oriented programming**, *BeiHang University*